



A.D. 1858, 20th *FEBRUARY*. N° 330.

S P E C I F I C A T I O N

OF

HENRY EDWARDS.

TOPPERS FOR FEEDING BOTTLES, &c.

LONDON:

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A.D. 1858, 20th *FEBRUARY*. N^o 330.

Stoppers for Feeding Bottles, &c.

LETTERS PATENT to Henry Edwards, of Bishopsgate Street, in the City of London, for the Invention of “**IMPROVEMENTS IN STOPPERS FOR FEEDING BOTTLES AND OTHER VESSELS.**”

Sealed the 14th August 1858, and dated the 20th February 1858.

PROVISIONAL SPECIFICATION left by the said Henry Edwards at the Office of the Commissioners of Patents, with his Petition, on the 20th February 1858.

I, HENRY EDWARDS, of Bishopsgate Street, in the City of London, do
5 hereby declare the nature of the Invention for “**IMPROVEMENTS IN STOPPERS FOR FEEDING BOTTLES AND OTHER VESSELS,**” to be as follows :—

This Invention has for its object improvements in stoppers for feeding bottles and other vessels. For these purposes each stopper is made with a passage through it, and such passage for a part of its length is conical, or
0 larger at one end than the other, the larger end being towards the interior of the vessel. In the passage is applied a conical or suitable plug, which is ground or fitted accurately to the interior of the passage ; and there is a stem which passes to the exterior of the stopper, which when pressed on causes the plug to move inwards, and thus is the passage opened to admit air to flow
5 into the vessel, and also in some vessels to admit of the fluid contained in the

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vessel to flow out through the stopper. The plug is constantly pressed in an outward direction by a vulcanized india-rubber or other suitable elastic material or spring.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Henry Edwards in the Great Seal Patent Office on the 5 20th August 1858.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, HENRY EDWARDS, of Bishopsgate Street, in the City of London, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twentieth day of February, in the year of our Lord 10 One thousand eight hundred and fifty-eight, in the twenty-first year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Henry Edwards, Her special licence that I, the said Henry Edwards, my executors, administrators, and assigns, or such others as I, the said Henry Edwards, my executors, administrators, and assigns, should at any 15 time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "**IMPROVEMENTS IN STOPPERS FOR FEEDING BOTTLES AND OTHER VESSELS**," upon the condition (amongst 20 others) that I, the said Henry Edwards, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next 25 and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Henry Edwards, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:— 30

This Invention has for its object, improvements in stoppers for feeding bottles and other vessels. For these purposes each stopper is made with a passage through it, and such passage for a part of its length is conical or larger at one end than the other, the larger end being towards the interior of the vessel. In the passage is applied a conical or suitable plug, which is ground 31

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or fitted accurately to the interior of the passage, and there is a stem which passes to the exterior of the stopper, which when pressed on causes the plug to move inwards, and thus is the passage opened to admit air to flow into the vessel, and also in some vessels to admit of the fluid contained in the vessel to
5 flow out through the stopper. The plug is constantly pressed in an outward direction by a vulcanized india-rubber spring.

Having thus stated the nature of my said Invention, I will proceed more fully to describe the manner of performing the same.

DESCRIPTION OF THE DRAWING.

10 Figure 1 shows a stopper suitable to be applied to feeding bottles or other vessels, the class of feeding vessel to which it is applied is shown by dotted lines. The body *a* of the stopper is of a conical form, and is to be of a diameter suitable to fit the bottle or other vessel to which it is to be applied. The stopper is hollow and the passage through it is to be closed by a conical or
15 suitable plug *b*, having a stem *c*, which passes through the stopper *a*. The plug *b* is preferred to be conical at its lower end, and it fits the hollow conical recess within the stopper when upheld by a spring of vulcanized india-rubber. The form of the exterior of the stopper may be greatly varied according to the class of vessel in which it is to be used, and the form of the vulcanized india-
20 rubber springs may also be greatly varied according to the purpose for which the stoppers are to be used.

Figures 1, 2, and 3, show various forms of stoppers, those shewn at Figures 1 and 2 though different in shape are similar to each other in respect to having the vulcanized india-rubber spring in the form of a case or covering to
25 the lower parts of the stopper, such case or covering in each stopper has one or more perforations, so that when the stem of the plug is pressed down it extends the spring casing or cover *d* of vulcanized india-rubber, allows air to pass from the exterior to the stopper and through the hole or holes in the elastic covering *d*, and thence into the vessel. Or, if the bottle or vessel be inverted
30 the fluid may flow through the stopper, whilst air is passing into the vessel. The mode in which it is preferred that the spring covering *d* should be fixed to a stopper formed as at Figures 1 and 2, is by its upper edge which is turned inwards and fixed between the upper and lower parts of the stopper, and these two parts of a stopper may be fixed together by screws or otherwise. In
35 Figure 3 the vulcanized india-rubber spring *d* consists simply of a short split tube or ring or band of india-rubber, which, so long as the stem of the plug is not pressed on, upholds the stem of the conical plug within the conical recess

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so as to close the air-passage which is formed through the stopper. The stopper shown at Figure 3 is in shape suitable for stopping the vent-hole of a beer or other cask, or it may be made of other forms to suit different descriptions of vessels.

Having thus described the nature of my Invention, and the manner of 5 performing the same, I would have it understood that what I claim is the application of india-rubber springs to stoppers with passages through them closed by conical or suitable valves as herein described.

In witness whereof, I, the said Henry Edwards, have hereunto set my hand and seal, this Nineteenth day of August, in the year of our Lord 10
One thousand eight hundred and fifty-eight.

HENRY EDWARDS. (L.S.)

Witness,

JNO. ALCOCK.

LONDON:

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FIG. 1.

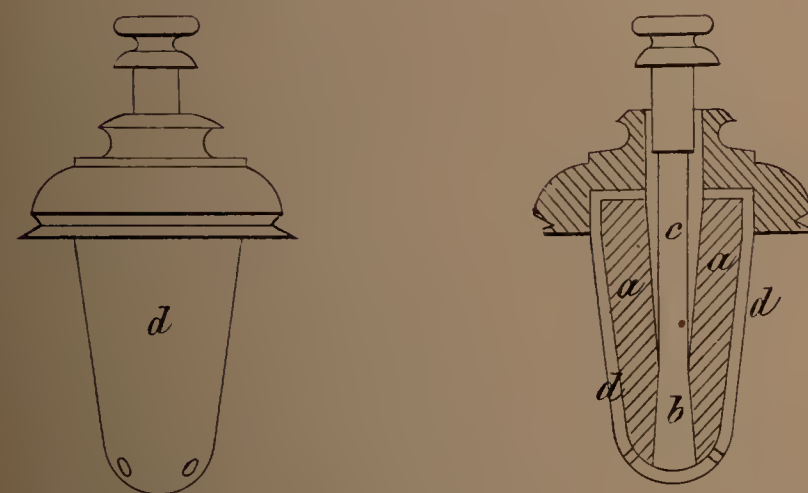


FIG. 2.

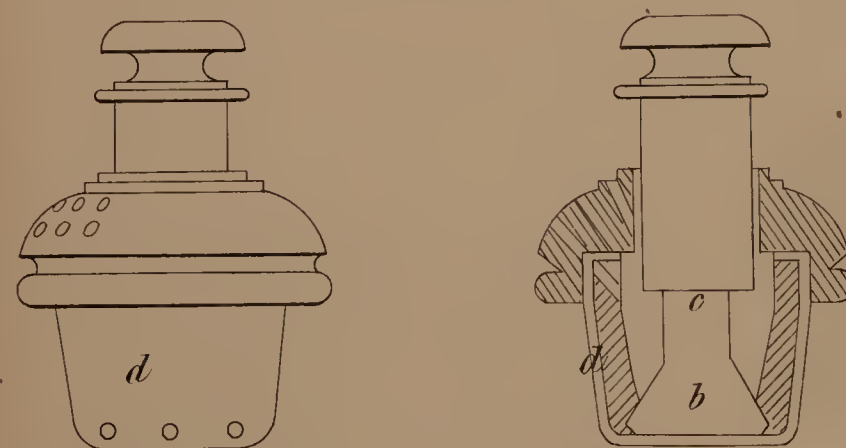
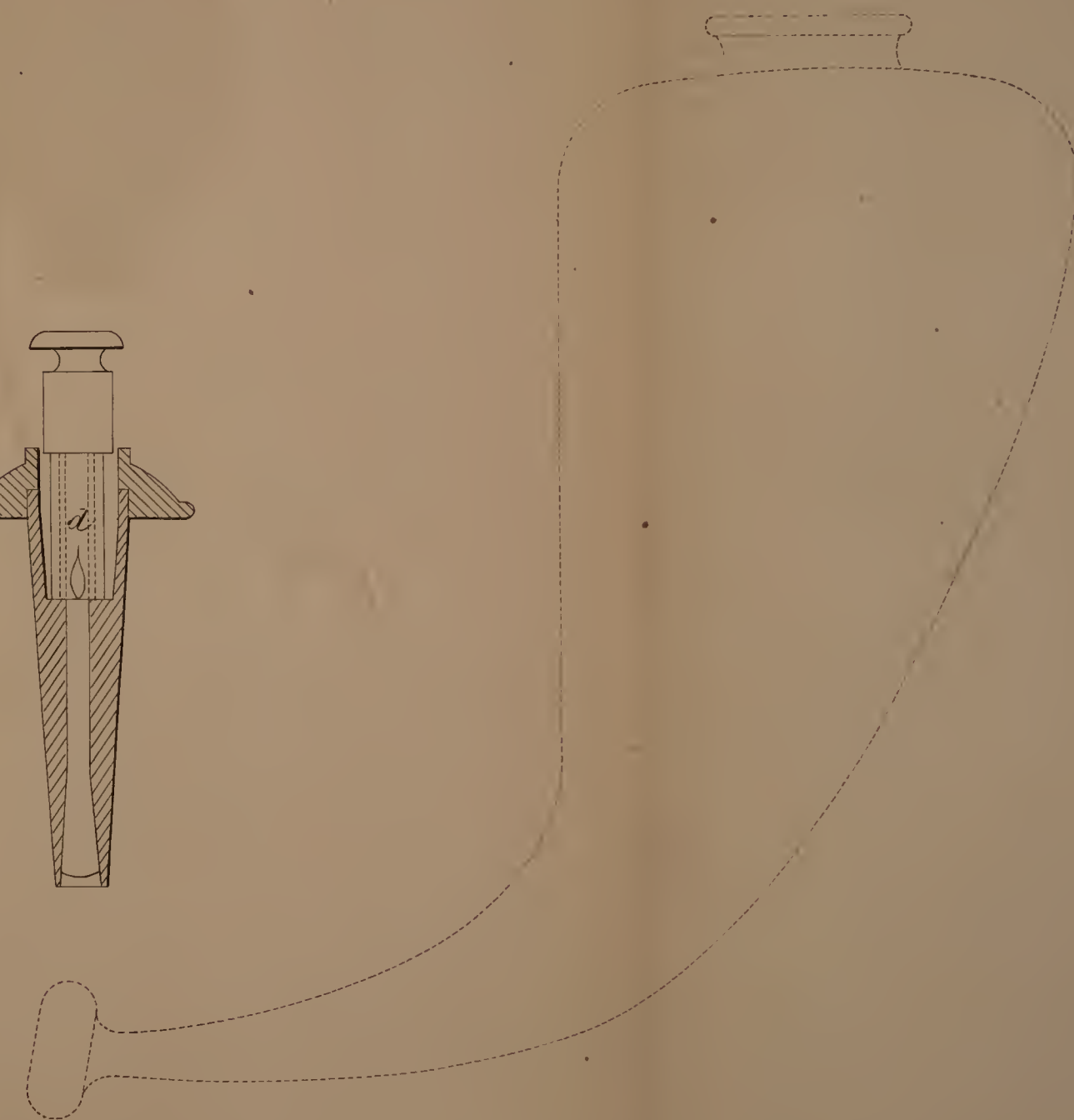
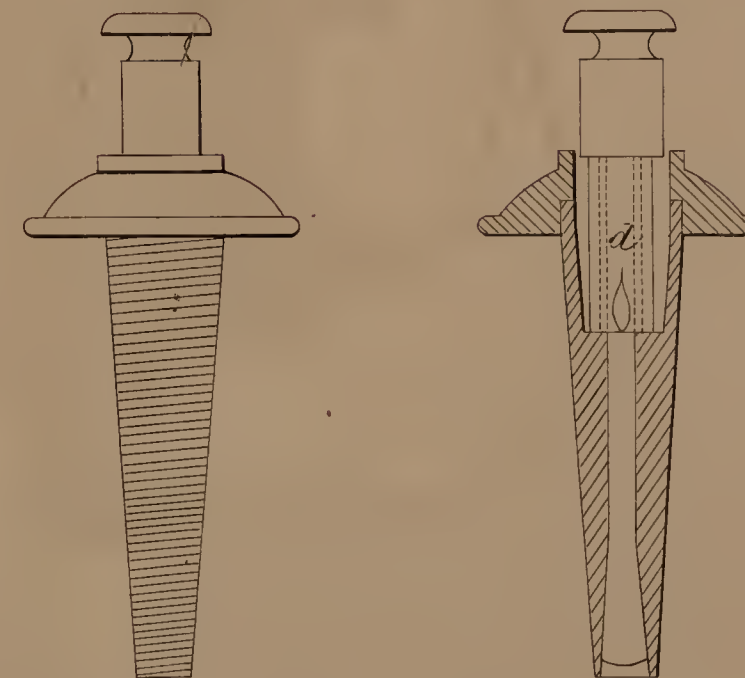


FIG. 3.



The filed drawing is colored.

Drawn on Stone by Malby & Sons.

